

decisions, with the aim of improving inpatient outcomes among women with vulvar cancer.

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PATTERNS OF CARE, COSTS AND OUTCOMES OF CHEST PAIN PATIENTS WITHIN TWO YEARS OF INITIAL VISITS TO THE ER

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OBJECTIVES: To describe the pattern of care, costs, and outcomes of chest pain patients at two years after an initial ER visit using large longitudinal claim database. **METHODS:** This was a retrospective cross-sectional study using BlueCross BlueShield of Texas claims data of patients with unspecific chest pain (from 2008 to 2011). Only patients who have had three years of continuous enrollment with six months prior to their initial visits to the ER and at least two years of follow-up after the ER visit were included. Patients were categorized into four groups; group1 included patients who were sent home after their ER visit, group2 included patients who were admitted into observation units, group3 included patients who were admitted into inpatient care and group4 included patients who were transferred into observation units and then inpatient care. The measured outcomes included myocardial infarction (MI), invasive cardiac procedures and associated costs of circulatory diseases subsequent to the emergency room visits up to two years of follow-up. **RESULTS:** A total of 172,627 met the inclusion criteria. Of those, 23.30% enrollees (40,219) had ER visits. Group1 included 28.1% of the total patients, group2 included 66.77%, group3 included 1.13% and group4 included 4.04%. The highest percentage of PTCA and CABG procedures were observed in group3 (13%, 11.7%) followed by group4 (7.9%, 1.7%), group1 (4.7%, 1.4%) and group2 (4.2%, 0.99%). The highest percentage of MI were observed in group3 (21.9%) followed by group4 (5.7%), group2 (4, 4.1%) and group1(3.3%). Group3 had also the highest cost associated with circulatory diseases with a median of (\$12,084) followed by group4 (\$1,496), group1(\$1,154) and group2 (\$915). **CONCLUSIONS:** Based on the preliminary descriptive statistics, patients admitted to observation units, in our population, had the lowest percentage of cardiac invasive procedures and circulatory diseases associated costs at two years of follow-up after an initial ER visit with chest pain.

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IMPACT OF ADVERSE DRUG EVENTS ON HOSPITAL LENGTH OF STAY AND HOSPITALIZATION COSTS IN HOSPITALS FOR 2003-2009 IN THE UNITED STATES

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OBJECTIVES: To assess the effects of adverse drug events (ADEs) as the reason for admission on hospital length of stay (LOS) and hospitalization costs in US hospitals. **METHODS:** The study used the Nationwide Inpatient Sample of the Healthcare Cost and Utilization Project for 2003-2009. ADEs were defined as drug poisoning due to inappropriate medication uses or errors and adverse effects from drugs administered. A case-control matching method was used to determine LOS and hospitalization costs attributable to ADEs. For each case patient, one control patient was matched based on sex, age(±5 years), race, exact diagnosis, same hospital and same calendar year of discharge. LOS and hospitalization costs attributable to ADEs were estimated using the recycled prediction method. This method predicted outcomes for patients with ADEs by calculating outcomes using estimated coefficients from all sample using generalized linear model after adjusting for the study variables. Then, LOS and hospitalization costs attributable to ADEs were defined as the differences between the predicted outcomes assuming the patients with ADEs as having ADEs and the predicted outcomes assuming the patients with ADEs not having ADEs. All costs were converted to 2011 US dollars using consumer's price indices and calculated per-discharge. **RESULTS:** A total of 6076 patients with ADEs were matched with control patients. The matched control patients had a mean LOS of 4.50 days versus 4.85 (p<0.05) for patients with ADEs. The average hospitalization cost for control patients was \$7648 compared to \$7785 for patients with ADEs. The LOS attributable to ADEs was 0.36 days per admission and the mean hospitalization cost attributable to ADEs was \$550 per admission. **CONCLUSIONS:** The incidence of ADE significantly increases LOS and hospitalization costs. To reduce these outcomes, it is necessary that a systematic approach to improve drug use process is undertaken including the monitoring of ADEs as an important outcome of pharmacotherapy.

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INCREMENTAL HEALTH CARE RESOURCE UTILIZATION ASSOCIATED WITH AUTOSOMAL DOMINANT POLYCYSTIC KIDNEY DISEASE

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OBJECTIVES: Incremental health care resource utilization associated with autosomal dominant polycystic kidney disease (PKD) was estimated. **METHODS:** Study data were from a large administrative claims and enrollment database. Individuals 18 y/o or older, enrolled in tracked health plans for 12 months from April 1, 2011 through March 31, 2012, and with an ICD-9-CM diagnosis code for "polycystic kidney, autosomal dominant" (753.13) or for "polycystic kidney, unspecified type (753.12) were identified as having autosomal dominant PKD. A

comparison group of individuals who met all inclusion criteria except were not classified as having autosomal dominant PKD, autosomal recessive PKD, cystic kidney disease, chronic kidney disease stage 3 or higher, nephrotic syndrome, diabetic kidney disease or kidney stones associated with cystic kidney disease was matched one-to-one with individuals with PKD on age and gender. Zero-inflated negative binomial models estimated associations between PKD and hospitalizations, hospital days, nursing home stays, nursing home days, inpatient psychiatric hospital stays, inpatient psychiatric hospital days, emergency room visits and outpatient visits, after adjusting for age, gender, Charlson comorbidity index, cardiovascular disease, diabetes and geographical region. **RESULTS:** A total of 3844 individuals with PKD, satisfied selection criteria and were matched with 3844 individuals without PKD. The sample was 53% female and 55% were between 45 to 64 years old. The PKD group was more likely to have cardiovascular disease (25.6% vs. 13.3%, p<0.001), diabetes (14.1% vs. 10.0%, p<0.001) and Charlson comorbidity index scores greater than zero (55.8% versus 37.5%, p<0.001). Autosomal dominant PKD was associated with marginally more, mean (standard error), hospitalizations 0.09 (0.01), p<0.001, hospital days 0.68 (0.08), p<0.001, emergency room encounters 0.29 (0.06), p<0.001 and outpatient encounters 6.9 (0.28), p<0.001. **CONCLUSIONS:** Autosomal dominant PKD was associated with incrementally greater health care resource utilization especially for outpatient encounters.

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HEALTH CARE USE AND EXPENDITURES IN DIABETES PATIENTS WITH CANCER

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OBJECTIVES: To investigate the prevalence of cancer comorbidity in individuals with diabetes, and its association with health care use and expenditures. **METHODS:** Our study was conducted with a quasi-experimental design approach. Subjects included patients who reported having diabetes from the 2010 Medical Expenditure Panel Survey (MEPS). The propensity scores technique was utilized to match patients with cancer versus without cancer to reduce selection bias in observable risk factors such as age, sex, race/ethnicity, physical activity, smoking and body mass index. Further, a series of weighted inferential statistics were used to test the effect of cancer comorbidity on the variables associated with health care use and expenditures. All analyses were accomplished by taking into consideration with MEPS sample clustering, stratification, and weight adjustments using SAS 9.22 analytical software. **RESULTS:** There were an estimated 21.03 million non-institutionalized adults who reported having diabetes in the US in 2010, of which, 3.89 million (18.5%) had cancer comorbidity. Individuals with diabetes were twice as likely as a comparable sample from the general US population to be diagnosed with cancer (odds ratio 2.1, 95% CI 1.9–2.49). Variables associated with health care use and expenditures (total office-based use and expenditures, outpatient department use and expenditures, emergency facility use and expenditures, prescription medication use and expenditures, etc.) for individuals with cancer were significantly higher than those without cancer (p<0.0001). **CONCLUSIONS:** Our study findings indicate the cancer individuals with diabetes are associated with increased health care use and expenditures. The major implementation may be benefit from early identifying selected diabetes patients because they seem to be at higher risk for cancer.

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WITHDRAWN